Atty Docket No. ENI-037

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Richard Bussiere et al.		
Serial No.:	10/713,560		
Filed:	November 14, 2003		
For:	DISTRIBUTED INTRUSION RESPONSE SYSTEM		
Assignee:	Enterasys Networks, Inc.		
Examiner:	Thomas M. Szymanski		
Art Unit:	2134	Confirmation No. 8242	Paper No. 13

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF MARK TOWNSEND PURSUANT TO 37 CFR § 1.131

Dear Sir:

In support of my claim of prior invention of the invention described in the referenced application in view of the Sung et al. reference cited in the June 29, 2007, office action, I hereby declare as follows:

1. My name is Mark Townsend. I am an applicant and co-inventor of the invention described and claimed in the referenced patent application.

2. In association with others, I conceived of the invention described in the application before April 14, 2003. Prior to January 2, 2003, I participated in discussions with one or more co-inventors regarding the implementation of the Distributed Intrusion Response System described in the Enterasys Invention Disclosure Form identified in the accompanying Declaration of Richard Graham.

3. Initially, the group of people involved in the discussions, including myself, undertook the task of developing the invention described in the Invention Disclosure Form during any spare time available to us beyond time spent carrying out our regular obligations to produce and market existing company products. As a result, we were not able to commit all of our time to continuous development of the invention. Nevertheless, we spent all available time diligently developing the invention. Our efforts included telephone conversations, e-mail exchanges, in-person meetings, tasking computer programmers to implement coding schemes, and reviewing code and evolving implementations of the invention. A copy of a representative first example of an e-mail exchange,

dated January 17, 2003, between myself and an Enterasys computer programmer I asked to provide programming services related to the development of the Distributed Intrusion Response System based on modifications to Enterasys's existing Dragon Intrusion Detection System (Dragon) and Enterasys's existing User Personal Network (UPN) network management system is attached hereto as Exhibit A.

4. Subsequent to January 17, 2003, I periodically communicated with one or more of the other co-inventors regarding means available to us to implement the invention as contemplated. I also communicated with others of Enterasys who I believed would be able to assist in the implementation through programming activities. One person I spoke with in particular, Andy Beats, was asked to explain the functioning of the Dragon and UPN operations and, in particular, we discussed means by which intrusion detection signals from the Dragon system could be trapped and transferred to the existing Enterasys network management system referred to as Atlas for the purpose of targeted network entry device modification. A copy of a second representative example of an e-mail exchange between myself and Mr. Beats, dated February 28, 2003, related to the implementation of the present invention is attached hereto as Exhibit B.

5. Subsequent to February 28, 2003, as I and other inventors performed our primary functions with the company, we continued to discuss the implementation of the invention and identified two Enterasys programmers with experience working with the Dragon system, Salo Fajer and Tom May, able and with some time available, to assist in coding the conceived implementation of the invention. Over the course of a few weeks, generated initial coding used to carry out the intended function of the invention. A copy of the preliminary coding for that purpose that either or both of Mr. Fajer and Mr. May provided to me for my review and dated April 15, 2003, is attached hereto as Exhibit C.

6. Subsequent to April 15, 2003, I worked with Mr. Fajer and Mr. May to complete the preliminary programming for the invention. A copy of a third example e-mail set generated over the period from May 1, 2003, to May 2, 2003, culminated in a statement by Mr. Fajer confirming his and Mr. May's efforts in the development of the programming for a demonstration model of the invention, all in response to internal discussions regarding improvements to network system security. A copy of that e-mail set is attached hereto as Exhibit D. Shortly thereafter, Mr. May and I discussed the generated computer program and certain features to be "tweaked." Mr. May

provided me a copy of his notes taken at the time of our discussion, specifically on May 7, 2003. A copy of Mr. May's notes as provided to me is attached hereto as Exhibit E.

7. Subsequent to May 7, 2003, over a period of several weeks during which all involved in the development of the invention continued to perform our regular duties for the company, Mr. May and Mr. Fajer, pursuant to my instructions and requests, made adjustments to the programming for the invention, until on or about July 28, 2007. On June 25, 2003, either or both of Mr. May and Mr. Fajer presented to me a summary flow diagram they had generated after substantially completing the coding for the demonstration model of the invention to perform as intended. That summary flow diagram of June 25, 2003, is attached hereto as Exhibit F.

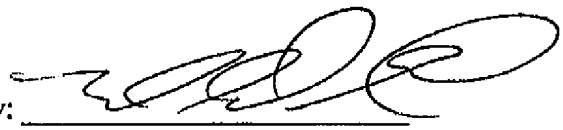
8. Between June 25, 2003, and July 28, 2003, we completed final modifications to a working prototype of the invention. At that time, I began preparation of a PowerPoint® presentation for initiating interest in establishing the implementation of the invention as an official company development project. The summary flow diagram of the invention operating as intended was included and shown to company management. I completed the presentation on or about July 28, 2003. A copy of the presentation is attached hereto as Exhibit G.

9. On or about August 4, 2003, I reviewed completed Perl script programming code representing the implementation of the invention in a computing system. A copy of the code generated on or about August 4, 2003, is attached hereto as Exhibit H. I believe that the invention was operational for its intended purpose at least as of that date.

10. On or about August 6, 2003, I demonstrated to a prospective customer the invention as implemented. In the course of running an example of the invention on the Enterasys internal network system using the programming code of Exhibit H, I also showed to the prospective customer the presentation of Exhibit G.

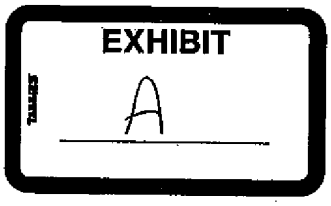
11. Upon information and belief, the invention described in the referenced application was conceived at least as of January 2, 2003, and diligently reduced to practice no later than August 6, 2003.

12. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 USC 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued.

By: 

Mark Townsend, Applicant

Date: 10/25/07



Townsend, Mark

From: Skowronek, Kurt
Sent: Friday, January 17, 2003 1:38 AM
To: Townsend, Mark; Post, James
Subject: RE: UPN/Dragon

Mark,

Jim and I worked on this yesterday afternoon and ran up against a couple of issues.
The discovery script process would run the aliasgreb and statalias, we will need to do this in either windows or solaris. So we were moving down a path of having Dragon send a trap to console and console was going to initiate the "discovery script" and policy set. Using Console 1.1 is doable but needs more time to futz with it because we'll need to rewrite the dragon's trap into hp format so that it recognizable by the alarm notification tool in Console.

After doing some digging and prodding, I was able to get a OLD copy(circa 2000) of linux based Q tools. I will try to play with them when I get achance. If you know who can get us and updated linux tool set, this would make this script much easier to write and launch directly form Linux not involve the other mess.

I don't expect to have anything to you next week though. I am just resetting any expectation that you may have or have committed to.

I am extremely busy, trying to keep up with everything this month. I don't know why it is this busy so early in the quarter but I am booked out through until Feb already.
<KJS>

-----Original Message-----
From: Townsend, Mark
Sent: Monday, January 13, 2003 10:53 AM
To: Post, James; Skowronek, Kurt
Subject: UPN/Dragon

Gents,

Here's a sample slide regarding this morning's discussion.

If you have any thoughts, I'm all ears!

Thanks,

~Mark

<< File: Proof-of-Concept.ppt >>

Mark D. Townsend
Reg. Director Systems Engineering
Enterasys Networks
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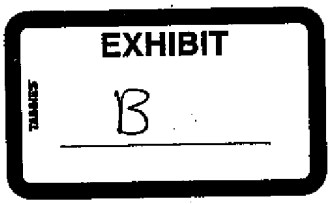
Andover, MA 01810
Tel 978 684 1623
markt@enterasys.com



Townsend, Mark

From: Townsend, Mark
Sent: Friday, February 28, 2003 3:42 PM
To: Beats, Andy
Subject: thoughts 4 u

Importance: High

Andy,

Dragon 6 has a SNMP module on the sensor; you could have it, not alarm tool, send a SNMP trap to Atlas. I remember some of your old training from Durham -- let's use the tools in NetSight to set Policies for SNMP traps and take appropriate actions. I figured that would be old hat for you.

Just a thought.

~Mark

Mark D. Townsend
Enterasys Networks
978 684 1623

---SNIP---
Lab 6 (HIDS Active Response) is nowhere NEAR the point of STARTING development, because I will need either (1) to spend a couple of days with a development engineers who can provide me with solid example PERL scripts and how they can be used so that the field can benefit from the lab or (2) the Dragon Team will need to provide valid scripts and details on how to use them. **The goal here is to have the HIDS detect an event and kick off a PERL script (wrapped module) which will "do something in response to the detected event". I need the team's advice on what that "something" might be, and an accompanying script that will accomplish the desired "active response".**

Lab 7 (Alarmtool Active Response) has not even started development, as I do not want to use the suggested PERL script that adds an ACL to a Cisco router. I think it would be much better to modify the current script (or create a new one) that adds an ACL to an Enterasys product. I have not had time to work on that, and could very much use the team's assistance in this regard. **[Sam Stover indicated that he can obtain a script which accomplishes this. If Sam's script is acceptable to the team, we'll put it into production for a lab exercise and run with it.]**

EXHIBIT C

Role = Test UPN Test 01
Rule kill TCP 80 assigned to VLAN 99 (discard)

---------- Frame 1196 ----------

Frame	Status	Source Address	Dest. Address	Size	Rel. Time	Delta Time	Abs. Time	Summary
1196		TMAY-XP1	[10.10.10.253]	160	0:04:02.358	0.006.402	04/15/2003 04:29:36 PM	SNMP: Set enterprise.5624.1.2.6.1.5.1.3.5 .. enterprise.5

```
DLC:  ----- DLC Header -----
      DLC:
      DLC:  Frame 1196 arrived at  16:29:36.5051; frame size is 160 (00A0 hex) bytes.
      DLC:  Destination = Station Cbltri9C02F0
      DLC:  Source      = Station 000347B54CBD
      DLC:  Ethertype   = 0800 (IP)
      DLC:
IP:  ----- IP Header -----
      IP:
      IP:  Version = 4, header length = 20 bytes
      IP:  Type of service = 00
      IP:        000. ....  = routine
      IP:        ...0 .... = normal delay
      IP:        .... 0... = normal throughput
      IP:        .... .0.. = normal reliability
      IP:        .... ..0. = ECT bit - transport protocol will ignore the CE bit
      IP:        .... ...0 = CE bit - no congestion
      IP:  Total length    = 146 bytes
      IP:  Identification  = 36504
      IP:  Flags           = 0X
      IP:        .0.. .... = may fragment
      IP:        ..0. .... = last fragment
      IP:  Fragment offset = 0 bytes
      IP:  Time to live    = 128 seconds/hops
      IP:  Protocol        = 17 (UDP)
      IP:  Header checksum = 824F (correct)
      IP:  Source address      = [10.10.10.99], TMAY-XP1
      IP:  Destination address = [10.10.10.253]
      IP:  No options
      IP:
UDP:  ----- UDP Header -----
      UDP:
      UDP:  Source port      = 1866
      UDP:  Destination port = 161 (SNMP)
      UDP:  Length           = 126
      UDP:  Checksum         = B82A (correct)
      UDP:  [118 byte(s) of data]
      UDP:
SNMP:  ----- Simple Network Management Protocol (Version 1) -----
      SNMP:
      SNMP:  SNMP Version = 1
      SNMP:  Community    = public
      SNMP:  Command      = Set request
      SNMP:  Request ID   = 22112
      SNMP:  Error status = 0 (No error)
      SNMP:  Error index  = 0
      SNMP:
      SNMP:  Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.3.5} (enterprise.5624.1.2.6.1.5.1.3.5)
      SNMP:  Value  = 4
      SNMP:
      SNMP:  Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.2.5} (enterprise.5624.1.2.6.1.5.1.2.5)
      SNMP:  Value  = Test
      SNMP:
      SNMP:  Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.4.5} (enterprise.5624.1.2.6.1.5.1.4.5)
      SNMP:  Value  = 2
      SNMP:
      SNMP:  Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.6.5} (enterprise.5624.1.2.6.1.5.1.6.5)
      SNMP:  Value  = 2
      SNMP:
```

Note: Discard VLAN = 4000.

(Role) Test 01
↳ TCP 99 ↓
↳ Ether IP ↓
Role Test 02

UPN Test 02 .cap
144 ↓ 149
393 → 398

(Role) Test 01
↳ mac "99"

UPN Test 03 .cap
150 → 154

Policy profile table. what is 5?
] group? #
Role name!

---------- Frame 1197 ----------

Frame	Status	Source Address	Dest. Address	Size	Rel. Time	Delta Time	Abs. Time	Summary
1197		[10.10.10.253]	TMAY-XP1	160	0:04:02.374	0.015.501	04/15/2003 04:29:36 PM	SNMP: GetReply enterprise.5624.1.2.6.1.5.1.3.5 .. enterprise.5(

```
DLC:  ----- DLC Header -----
      DLC:
      DLC:  Frame 1197 arrived at  16:29:36.5206; frame size is 160 (00A0 hex) bytes.
```

```
       DLC:  Destination = Station 000347B54CBD
       DLC:  Source      = Station Cbltr19C02F0
       DLC:  Ethertype   = 0800 (IP)
       DLC:
  IP: ----- IP Header -----
       IP:
       IP: Version = 4, header length = 20 bytes
       IP: Type of service = 00
       IP:       000. ....   = routine
       IP:       ...0 ....   = normal delay
       IP:       .... 0...   = normal throughput
       IP:       .... .0..   = normal reliability
       IP:       .... ..0.   = ECT bit - transport protocol will ignore the CE bit
       IP:       .... ...0   = CE bit - no congestion
       IP: Total length    = 146 bytes
       IP: Identification  = 666
       IP: Flags           = 0X
       IP:       .0.. ....   = may fragment
       IP:       ..0. ....   = last fragment
       IP: Fragment offset = 0 bytes
       IP: Time to live    = 255 seconds/hops
       IP: Protocol        = 17 (UDP)
       IP: Header checksum = 8F4D (correct)
       IP: Source address      = [10.10.10.253]
       IP: Destination address = [10.10.10.99], TMAY-XP1
       IP: No options
       IP:
  UDP: ----- UDP Header -----
       UDP:
       UDP: Source port      = 161 (SNMP)
       UDP: Destination port = 1866
       UDP: Length           = 126
       UDP: No checksum
       UDP: [118 byte(s) of data]
       UDP:
  SNMP: ----- Simple Network Management Protocol (Version 1) -----
       SNMP:
       SNMP: SNMP Version = 1
       SNMP: Community    = public
       SNMP: Command      = Get response
       SNMP: Request ID   = 22112
       SNMP: Error status = 0 (No error)
       SNMP: Error index  = 0
       SNMP:
       SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.3.5} (enterprise.5624.1.2.6.1.5.1.3.5)
       SNMP: Value  = 4
       SNMP:
       SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.2.5} (enterprise.5624.1.2.6.1.5.1.2.5)
       SNMP: Value  = Test
       SNMP:
       SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.4.5} (enterprise.5624.1.2.6.1.5.1.4.5)
       SNMP: Value  = 2
       SNMP:
       SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.1.5.1.6.5} (enterprise.5624.1.2.6.1.5.1.6.5)
       SNMP: Value  = 2
       SNMP:

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 Frame Status Source Address    Dest. Address      Size Rel. Time    Delta Time    Abs. Time              Summary
  1198        TMAY-XP1          [10.10.10.253]      133 0:04:02.378  0.004.483     04/15/2003 04:29:36 PM SNMP: Set     enterprise.5624.1.2.6.2.4.1.3.5.12, enterprise.5
DLC:  ----- DLC Header -----
       DLC:
       DLC:  Frame 1198 arrived at  16:29:36.5251; frame size is 133 (0085 hex) bytes.
       DLC:  Destination = Station Cbltr19C02F0
       DLC:  Source      = Station 000347B54CBD
       DLC:  Ethertype   = 0800 (IP)
       DLC:
  IP: ----- IP Header -----
       IP:
       IP: Version = 4, header length = 20 bytes
```

```
      IP: Type of service = 00
      IP:       000. ....   = routine
      IP:       ...0 .... = normal delay
      IP:       .... 0... = normal throughput
      IP:       .... .0.. = normal reliability
      IP:       .... ..0. = ECT bit - transport protocol will ignore the CE bit
      IP:       .... ...0 = CE bit - no congestion
      IP: Total length    = 119 bytes
      IP: Identification  = 36505
      IP: Flags           = 0X
      IP:       .0.. .... = may fragment
      IP:       ..0. .... = last fragment
      IP: Fragment offset = 0 bytes
      IP: Time to live    = 128 seconds/hops
      IP: Protocol        = 17 (UDP)
      IP: Header checksum = 8269 (correct)
      IP: Source address      = [10.10.10.99], TMAY-XP1
      IP: Destination address = [10.10.10.253]
      IP: No options
      IP:
 UDP: ----- UDP Header -----
      UDP:
      UDP: Source port      = 1866
      UDP: Destination port = 161 (SNMP)
      UDP: Length           = 99
      UDP: Checksum         = 25F7 (correct)
      UDP: [91 byte(s) of data]
      UDP:
SNMP: ----- Simple Network Management Protocol (Version 1) -----
      SNMP:
      SNMP: SNMP Version = 1
      SNMP: Community    = public
      SNMP: Command      = Set request
      SNMP: Request ID   = 22113
      SNMP: Error status = 0 (No error)
      SNMP: Error index  = 0
      SNMP:
      SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.2.4.1.3.5.12} (enterprise.5624.1.2.6.2.4.1.3.5.12)
      SNMP: Value  = 4
      SNMP:
      SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.2.4.1.2.5.12} (enterprise.5624.1.2.6.2.4.1.2.5.12)
      SNMP: Value  = {1.3.6.1.4.1.52.4.1.2.16.6.1.4.1.5.99.18.80.0}
      SNMP:

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 Frame Status Source Address    Dest. Address      Size Rel. Time     Delta Time    Abs. Time              Summary
  1199        [10.10.10.253]   TMAY-XP1            133 0:04:02.393   0.014.650     04/15/2003 04:29:36 PM SNMP: GetReply enterprise.5624.1.2.6.2.4.1.3.5.12, enterprise.5
DLC:  ----- DLC Header -----
      DLC:
      DLC:  Frame 1199 arrived at  16:29:36.5397; frame size is 133 (0085 hex) bytes.
      DLC:  Destination = Station 000347B54CBD
      DLC:  Source      = Station Cbltr19C02F0
      DLC:  Ethertype   = 0800 (IP)
      DLC:
IP: ----- IP Header -----
      IP:
      IP: Version = 4, header length = 20 bytes
      IP: Type of service = 00
      IP:       000. ....   = routine
      IP:       ...0 .... = normal delay
      IP:       .... 0... = normal throughput
      IP:       .... .0.. = normal reliability
      IP:       .... ..0. = ECT bit - transport protocol will ignore the CE bit
      IP:       .... ...0 = CE bit - no congestion
      IP: Total length    = 119 bytes
      IP: Identification  = 667
      IP: Flags           = 0X
      IP:       .0.. .... = may fragment
      IP:       ..0. .... = last fragment
      IP: Fragment offset = 0 bytes
```

```
      IP: Time to live    = 255 seconds/hops
      IP: Protocol        = 17 (UDP)
      IP: Header checksum = 8F67 (correct)
      IP: Source address      = [10.10.10.253]
      IP: Destination address = [10.10.10.99], TMAY-XP1
      IP: No options
      IP:
 UDP: ----- UDP Header -----
      UDP:
      UDP: Source port      = 161 (SNMP)
      UDP: Destination port = 1866
      UDP: Length           = 99
      UDP: No checksum
      UDP: [91 byte(s) of data]
      UDP:
SNMP: ----- Simple Network Management Protocol (Version 1) -----
      SNMP:
      SNMP: SNMP Version = 1
      SNMP: Community    = public
      SNMP: Command      = Get response
      SNMP: Request ID   = 22113
      SNMP: Error status = 0 (No error)
      SNMP: Error index  = 0
      SNMP:
      SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.2.4.1.3.5.12} (enterprise.5624.1.2.6.2.4.1.3.5.12)
      SNMP: Value  = 4
      SNMP:
      SNMP: Object = {1.3.6.1.4.1.5624.1.2.6.2.4.1.2.5.12} (enterprise.5624.1.2.6.2.4.1.2.5.12)
      SNMP: Value  = {1.3.6.1.4.1.52.4.1.2.16.6.1.4.1.5.99.18.80.0}
      SNMP:

- - - - - - - - - - - - - - - - - - - - [redacted] - - - - - - - - - - - - - - - - - - -
 Frame Status Source Address    Dest. Address      Size Rel. Time     Delta Time    Abs. Time              Summary
  1200        TMAY-XP1          [10.10.10.253]       90 0:04:02.400   0.006.832     04/15/2003 04:29:36 PM SNMP: Set      Cabletron.4.1.2.14.7.1.1.0 = 2
DLC:  ----- DLC Header -----
      DLC:
      DLC:  Frame 1200 arrived at  16:29:36.5466; frame size is 90 (005A hex) bytes.
      DLC:  Destination = Station Cbltr19C02F0
      DLC:  Source      = Station 000347B54CBD
      DLC:  Ethertype   = 0800 (IP)
      DLC:
 IP: ----- IP Header -----
      IP:
      IP: Version = 4, header length = 20 bytes
      IP: Type of service = 00
      IP:       000. ....   = routine
      IP:       ...0 .... = normal delay
      IP:       .... 0... = normal throughput
      IP:       .... .0.. = normal reliability
      IP:       .... ..0. = ECT bit - transport protocol will ignore the CE bit
      IP:       .... ...0 = CE bit - no congestion
      IP: Total length    = 76 bytes
      IP: Identification  = 36506
      IP: Flags           = 0X
      IP:       .0.. .... = may fragment
      IP:       ..0. .... = last fragment
      IP: Fragment offset = 0 bytes
      IP: Time to live    = 128 seconds/hops
      IP: Protocol        = 17 (UDP)
      IP: Header checksum = 8293 (correct)
      IP: Source address      = [10.10.10.99], TMAY-XP1
      IP: Destination address = [10.10.10.253]
      IP: No options
      IP:
 UDP: ----- UDP Header -----
      UDP:
      UDP: Source port      = 1866
      UDP: Destination port = 161 (SNMP)
      UDP: Length           = 56
      UDP: Checksum         = 420C (correct)
```

```
      UDP: [48 byte(s) of data]
      UDP:
SNMP: ----- Simple Network Management Protocol (Version 1) -----
      SNMP:
      SNMP: SNMP Version = 1
      SNMP: Community    = public
      SNMP: Command      = Set request
      SNMP: Request ID   = 22114
      SNMP: Error status = 0 (No error)
      SNMP: Error index  = 0
      SNMP:
      SNMP: Object = {1.3.6.1.4.1.52.4.1.2.14.7.1.1.0} (Cabletron.4.1.2.14.7.1.1.0)
      SNMP: Value  = 2
      SNMP:

- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

 Frame Status Source Address    Dest. Address      Size Rel. Time     Delta Time    Abs. Time              Summary
  1201        [10.10.10.253]   TMAY-XP1            90 0:04:02.407   0.007.496     04/15/2003 04:29:36 PM SNMP: GetReply Cabletron.4.1.2.14.7.1.1.0 = 2
DLC: ----- DLC Header -----
      DLC:
      DLC:  Frame 1201 arrived at  16:29:36.5541; frame size is 90 (005A hex) bytes.
      DLC:  Destination = Station 000347B54CBD
      DLC:  Source      = Station Cbltr19C02F0
      DLC:  Ethertype   = 0800 (IP)
      DLC:
 IP: ----- IP Header -----
      IP:
      IP: Version = 4, header length = 20 bytes
      IP: Type of service = 00
      IP:       000. ....   = routine
      IP:       ...0 .... = normal delay
      IP:       .... 0... = normal throughput
      IP:       .... .0.. = normal reliability
      IP:       .... ..0. = ECT bit - transport protocol will ignore the CE bit
      IP:       .... ...0 = CE bit - no congestion
      IP: Total length    = 76 bytes
      IP: Identification  = 668
      IP: Flags           = 0X
      IP:       .0.. .... = may fragment
      IP:       ..0. .... = last fragment
      IP: Fragment offset = 0 bytes
      IP: Time to live    = 255 seconds/hops
      IP: Protocol        = 17 (UDP)
      IP: Header checksum = 8F91 (correct)
      IP: Source address      = [10.10.10.253]
      IP: Destination address = [10.10.10.99], TMAY-XP1
      IP: No options
      IP:
UDP: ----- UDP Header -----
      UDP:
      UDP: Source port      = 161 (SNMP)
      UDP: Destination port = 1866
      UDP: Length           = 56
      UDP: No checksum
      UDP: [48 byte(s) of data]
      UDP:
SNMP: ----- Simple Network Management Protocol (Version 1) -----
      SNMP:
      SNMP: SNMP Version = 1
      SNMP: Community    = public
      SNMP: Command      = Get response
      SNMP: Request ID   = 22114
      SNMP: Error status = 0 (No error)
      SNMP: Error index  = 0
      SNMP:
      SNMP: Object = {1.3.6.1.4.1.52.4.1.2.14.7.1.1.0} (Cabletron.4.1.2.14.7.1.1.0)
      SNMP: Value  = 2
      SNMP:
```

Townsend, Mark

From: Fajer, Salo
Sent: Friday, May 02, 2003 11:30 AM
To: Dragon Team
Subject: RE: IPS future . . . and Enterasys UPN

I agree that there is a synergy between UPN and Dragon that we could take advantage of in the IPS story. Tom May and I are building a demo to use Dragon events to automatically set UPN Policies. We would love to see us integrate the existing tools we have to offer LAN based per port IPS! I know this has been discussed before, but imagine that Dragon sees a threat from an internal IP. It launches a Compass search and identifies the port in the network of the offender. Based on a previously set policy, it sets that port into a "penalty box" role and alerts the network admin. Or in a more advanced mode, blocks just that tcp port (i.e. SQL Slammer) on the physical port or denies ICMP. We have the current tools and features. It just needs to be tied together.

Unfortunately, the customer may purchase another vendor for the gateway device for now. However, we can actively secure the rest of the LAN.

On a less ambitious level of integration, the new N series are soon supposed to be able to trap on a hit on a policy or track application level usage. We need to make sure that the Matrix team sends this information out (i.e. syslog) in a method that Dragon can read. And, we need to make sure that we have a signature set to read this so that we at least merge UPN security events into Realtime.

What do you all think?

Thanks
Salo

-----Original Message-----
From: Beats, Andy
Sent: Friday, May 02, 2003 8:16 AM
To: Marsh, Todd; Savage, David; Lau, Ed; Hamilton, Jane; Fernandes, Cliff
Cc: Dragon Team
Subject: RE: IPS future . . . and Enterasys UPN
Importance: High

Todd, I don't argue the point you made. But with all due respect, don't we (ETS) need to be out there ***convincing our customers of what they need***? Sure, customers know their networks and they should be telling us what they need. But don't we have an opportunity to cajole, market, sell, etc. them on the Enterasys solutions? Hell, Cisco did it, all the way to the number one spot.

I understand IPS is a hot topic. But Dragon and UPN already exist, and have an extensive history to boot. With some savvy positioning, can't we elevate this solution in the customers' eyes? Shouldn't we break the paradigm that IPS is the end-all/be-all in this regard, and slide the ETS solutions in there at all possible opportunities to do so?

Maybe ETS stock will continue its rise even faster. ☺

My two cents . . .

-Andy

-----Original Message-----
From: Marsh, Todd
Sent: Friday, May 02, 2003 6:20 AM

To: Beats, Andy; Savage, David; Lau, Ed; Hamilton, Jane; Fernandes, Cliff
Cc: Dragon Team
Subject: RE: IPS future . . . and Enterasys UPN

In the summer time frame we will start to see some basic abilities in our Xpedition platform (e.g. the ability of the router to recognize that the flow set up rates are approaching a critical point and dynamically rate limit the line card that is causing the rise).

The UPN Acceptable Use Policy is fine but it is not dynamic and that is what customers are looking for.

> -----Original Message-----
> **From:** Beats, Andy
> **Sent:** Thursday, May 01, 2003 7:00 PM
> **To:** Savage, David; Lau, Ed; Hamilton, Jane; Fernandes, Cliff
> **Cc:** Dragon Team
> **Subject:** RE: IPS future . . . and Enterasys UPN
> **Importance:** High
>
> Folks, let's not omit the fact that our UPN strategy includes a "Threat Management" service. It's not exactly Intrusion Prevention, but it aligns our customers OUTSTANDINGLY WELL with the overall Enterasys security solution.
>
> > -----Original Message-----
> > **From:** Savage, David
> > **Sent:** Thursday, May 01, 2003 5:34 PM
> > **To:** Lau, Ed; Hamilton, Jane; Fernandes, Cliff
> > **Cc:** Dragon Team
> > **Subject:** RE: IPS future
> >
> > I think we should discuss this on our next Dragon Team call.
> >
> > > -----Original Message-----
> > > **From:** Lau, Ed
> > > **Sent:** Thursday, May 01, 2003 4:14 PM
> > > **To:** Savage, David; Hamilton, Jane; Fernandes, Cliff
> > > **Cc:** Dragon Team
> > > **Subject:** RE: IPS future
> > >
> > > Well said – even if we can roadmap it, it would go a long way towards keeping/winning customers.
> > >
> > > Edward Lau
> > > Systems Engineer
> > > Enterasys Networks
> > > (212) 946-9279
> > > (212) 643-9587 Fax
> > >
> > > > -----Original Message-----
> > > > **From:** Savage, David
> > > > **Sent:** Thursday, May 01, 2003 3:22 PM
> > > > **To:** Hamilton, Jane; Fernandes, Cliff
> > > > **Cc:** Dragon Team
> > > > **Subject:** RE: IPS future
> > > >
> > > > I think we need to look at today. Our competitors are starting to eat away at us with their NIDS IPS stories.

-----Original Message-----
From: Hamilton, Jane
Sent: Thursday, May 01, 2003 1:00 PM
To: Fernandes, Cliff
Cc: Dragon Team
Subject: RE: IPS future

We haven't really had a chance to evaluate it but may be looking at it in the near future.

-----Original Message-----
From: Fernandes, Cliff
Sent: Thursday, May 01, 2003 1:53 PM
To: Hamilton, Jane
Cc: Dragon Team
Subject: RE: IPS future

Thank you Jane. I will continue to use those avenues. There was a partner in China or Japan that had worked on an IPS for/with us a while back and we were going to test that internally. Is that still ongoing or did it not pan out?
Thanks
Cliff

-----Original Message-----
From: Hamilton, Jane
Sent: Thursday, May 01, 2003 1:43 PM
To: Fernandes, Cliff; Dragon Team
Subject: RE: IPS future

We address Host IPS in the roadmap presentation on the intranet site. We also discuss Active response, our current solution for Network IPS. Further review of network IPS is being discussed now as part of our 7.0 planning. Plus we in the process with Toronto of developing a Router, FW, VPN, limited IDS device that is planned to provide Network IPS in a couple of ways. That is most likely included on the XSR roadmap.
Regards,
Jane

-----Original Message-----
From: Fernandes, Cliff
Sent: Thursday, May 01, 2003 1:17 PM
To: Dragon Team
Subject: IPS future

Hello, I have a customer looking for information regarding our IPS strategy. Do we have anything that a customer under NDA can have access to for thier security planning?
Thanks

Cliff Fernandes

EXHIBIT
E

5/7

		Instance
ctVlanClassify	IngressList	4000.4.1.0
		4000.15.999.0
		4000.18.23.0
		4000.18.80.0
		4000.24.0.65536

taken from 2H252 w/

Static vlans 1 ... default
4000 discard

Vlan classification configurations:

4000 IP Port type 1 ICMP
4000 Bi IP Port 999
4000 Bi TCP Port 23 telnet
4000 Bi TCP Port 80 HTTP
4000 Bi MAC address MAC: 0 0 0 0 0 1

Then clearing NVRAM I configured:
- static VID = 4000 w/NO egress ports = discard
- Bi TCP 80 to VID 4000

Gives:

		Row	Formatted	Verbose
IngressList	4000.18.80.0	00:00:00:00	0—0	0—0
RowStatus				
RowInfo				

Then: ↳ Protocol Port Configuration
under the Rule → activate on Port #1
Notice that as I set the ports, all but is set in the "Formatted" field.

ctVlanClassifyIngressList

Formatted Value"

position → 1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8 1 2 3 4 5 6 7 8 1
Port on/off 0/1 ← → 0/1
example: 1 1 1 0 1 0 0 0 1 1 1 0 1 0 0 0 1 1 1 0 1 0 0 0 0
Hex → E8 : E8 : E8 : 0
↳ = Raw Octet.

Process:
1. Create discard Vlan
2. Set Rule
3. enable Rule
(from MIB-2 → dot1dBridge → qBridge MIB → MIBObjects → dot1

① dot1qVlanFdbId. instance Row
1.3.6.1.2.1.17.7.1.4.2.1.1 [4000] [Discard]

② ctVlanClassifyIngressList
1.3.9.1.4.1.52.1.2.16.6.1.4.1.5 [4000.18.80.0] [E8:E8:E

③ ctVlanClassifyRowStatus
1.3.6.1.4.1.6 [4000.18.80.0] [1]

EOF

Policy changes ... "atsys Policy Profile MIB"

Entity Box Policy ...

- Port Policy Profile = Role ID port
  instance = as ifs
  Raw Value = as Policy number!
  ↳ "Port Policy Profile Admin ID" 1.3.1.1.1.5624.1.2.6.3

- Name

  Policy Profile Name 5624.1.2.6.1

  instance = Policy number
  Raw Value = Name

- Policy Profile Port Vid

  instance = Policy #
  Raw Value = VLAN #

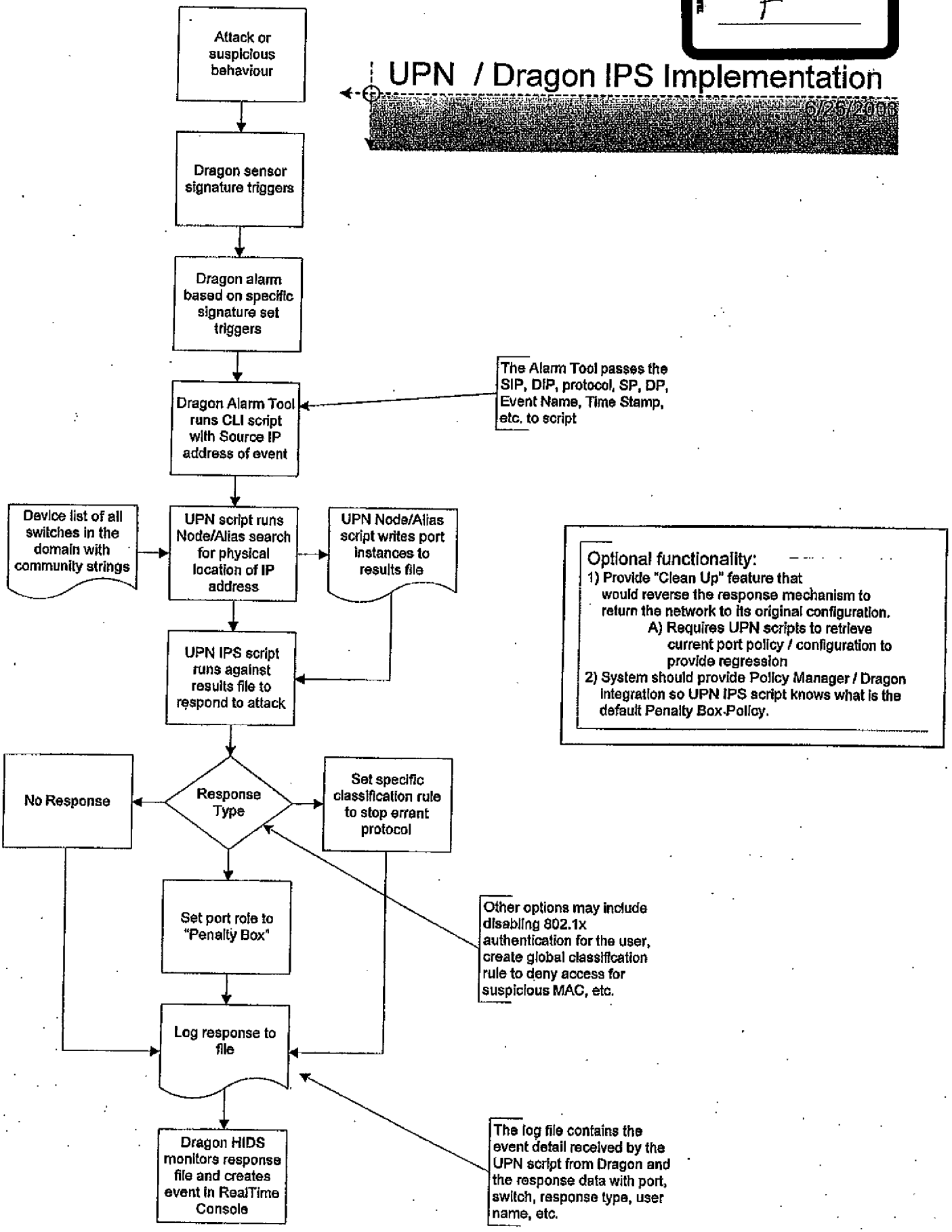
- Policy Profile Port Vid Status
  instance = Policy #
  Raw = enabled/disabled : 1/2

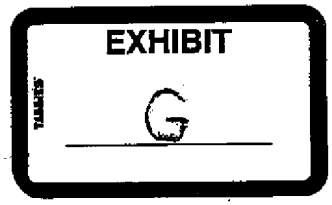
EXHIBIT

F

UPN / Dragon IPS Implementation

6/26/2003





IDS Integration with Intelligent LAN

A Secure Networks Proposal

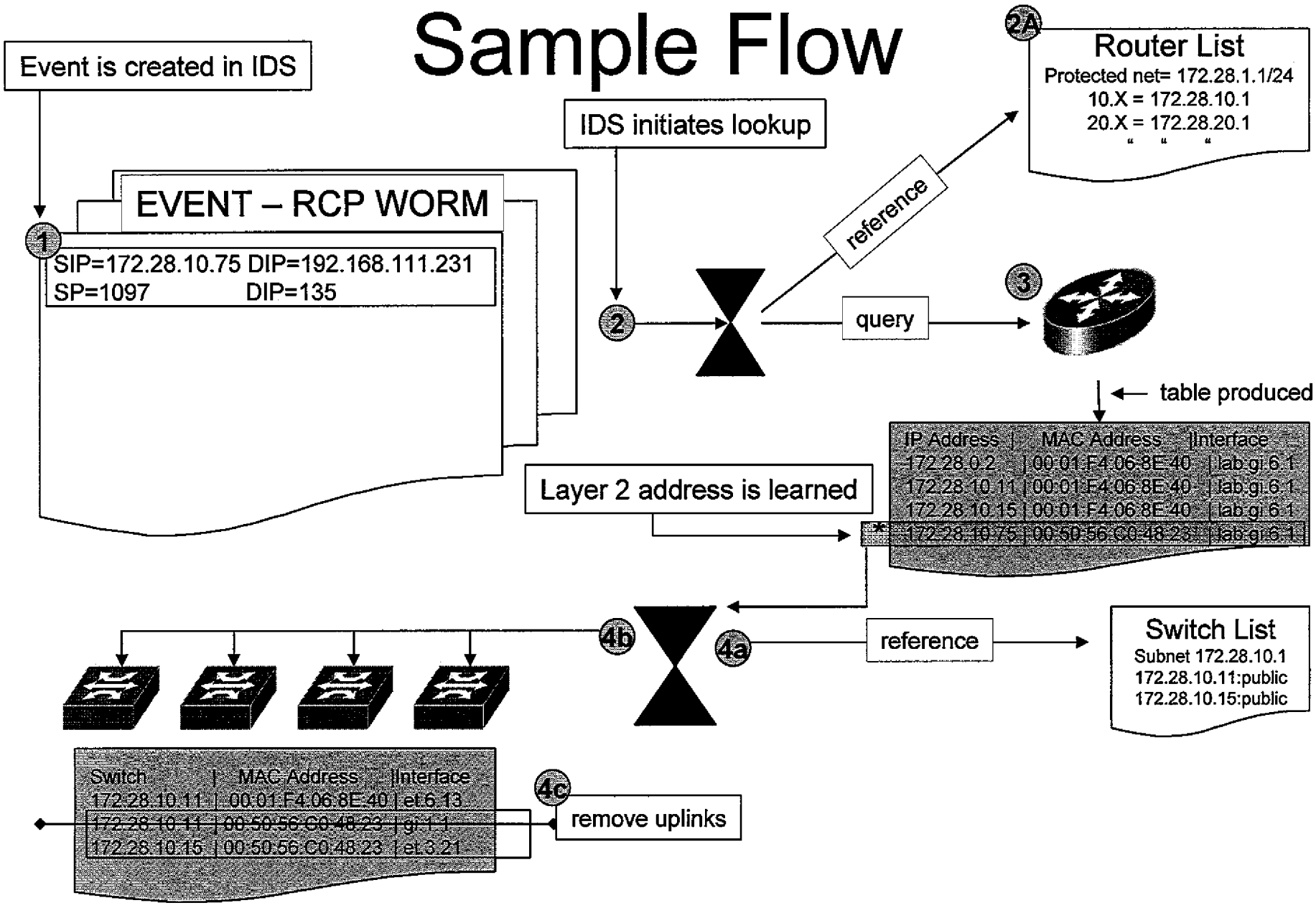
3 Separate Functions

- "Learn" – Physical ingress of event.
- "Log" – integrate learned "location" information and store with security event data.
- "Respond" – Perform logical change.

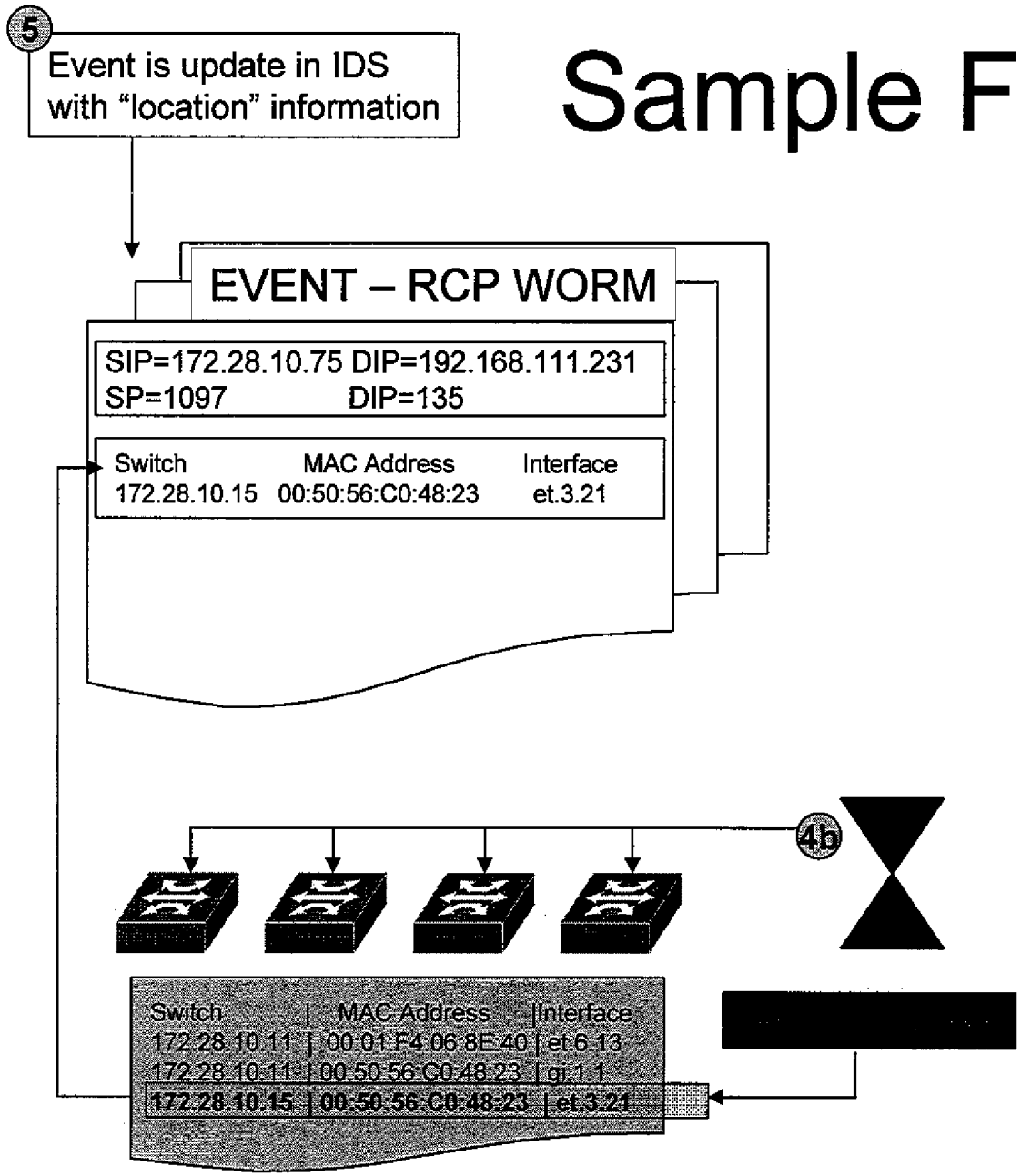
Learn

- Process in which security management system can associate a security event with it's physical ingress point to the network
  - First step before any 'action' (mitigation) can occur.
  - Multiple methods to do this.
    - Initiated by IDS
      - IDS does lookup (locator process)
      - IDS passes information to Management for lookup

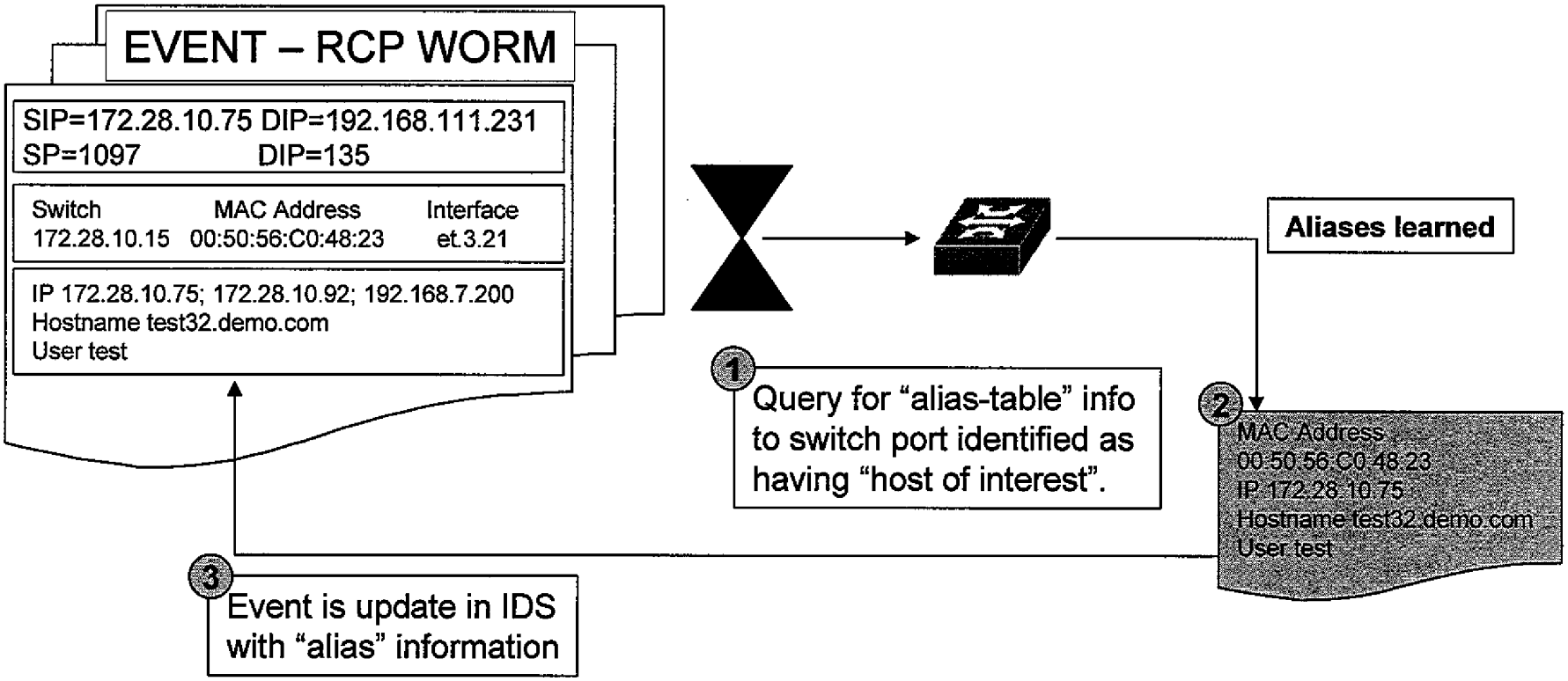
Sample Flow



Sample Flow

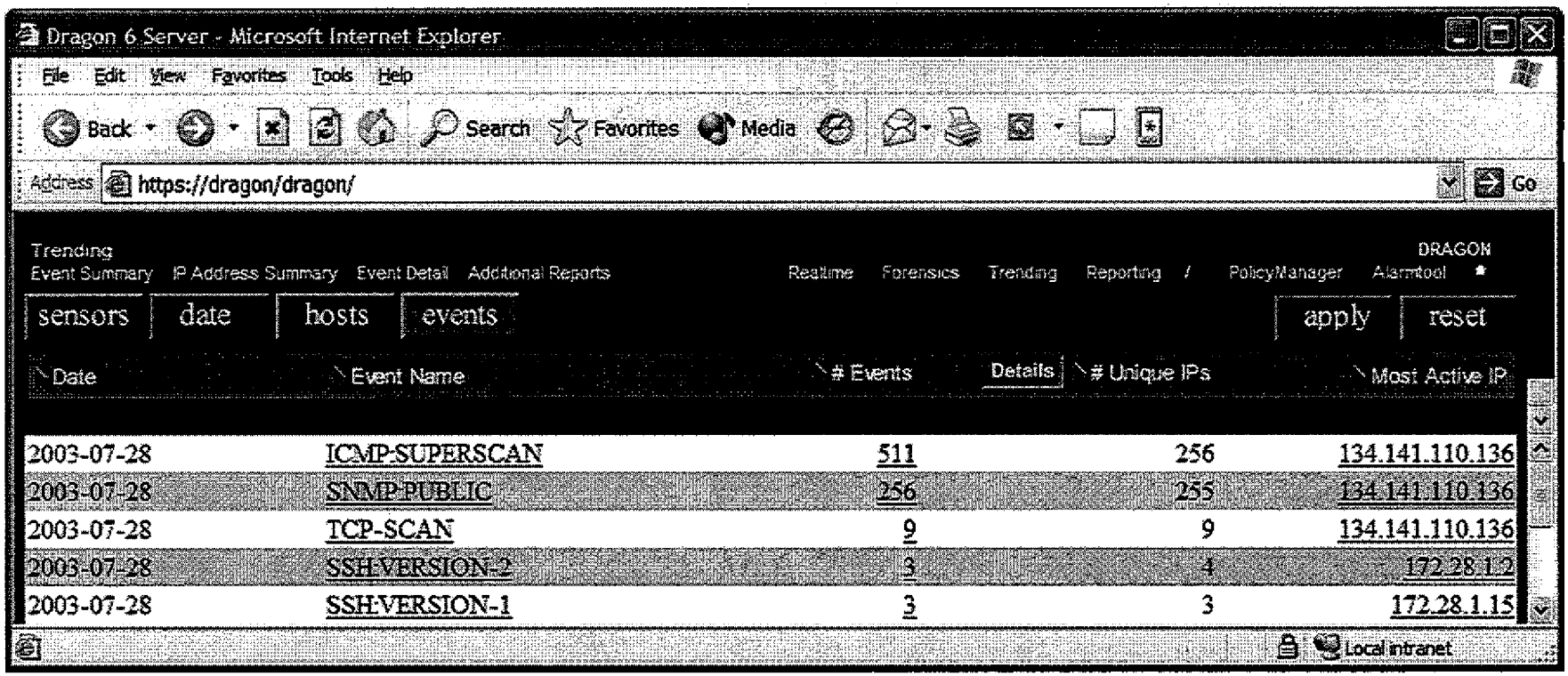


Optional – Alias Correlation



LOG

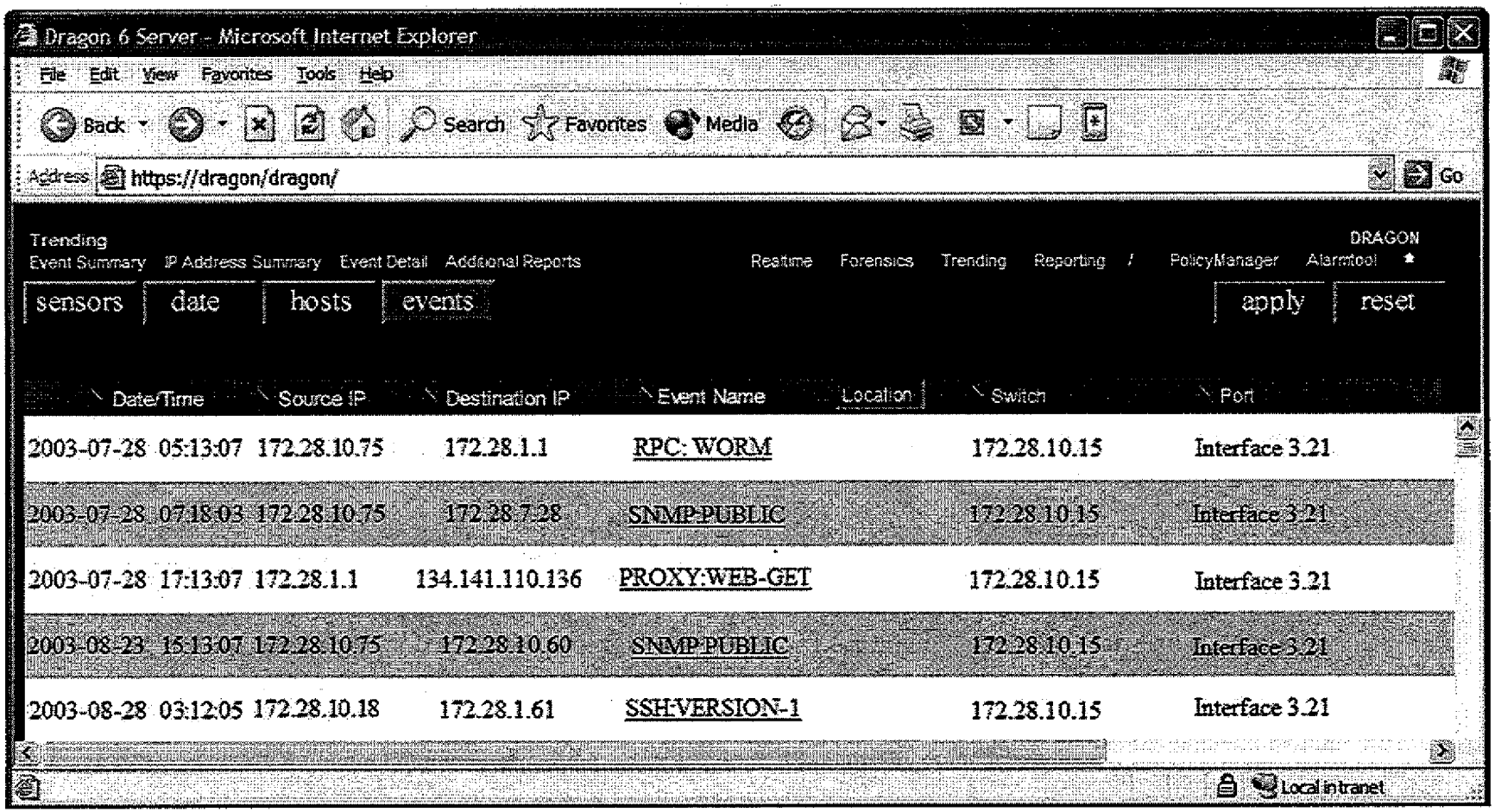
- Addition of “location” adds a new variable to the Security Database for reference
- Useful for historical correlation of security events
- Useful for tuning of “AUP”



Traditional DB contains what can be collected from the packet

- SIP / DIP (Layer 3)
- SP / DP (Layer 4)
- Event type
- # Events

Queries are limited to what data is in the DB!



Adding "Location" information to the same DB provides the admin a look at the Security Events from a different angle. In this scenario, the switch port is in a conference room. Implementing "Acceptable Use Policy" would have prevented 3 of above events from ever being forwarded.

RESPOND

- Knowing "Location" allows the IT Admin to program the system with "automated responses"
  - Type of Response is relevant to the "threat".
- Scenario:
  - User attempts to gain "root" access to a server that he has permissions to (FTP).
    - Dragon is configured to monitor for "root" access
      - Learns Location
      - Automated Policy Change to Location (Port) to deny FTP services
    - Net affect – Proactive Security of resources
      - (Auditing of AUP)

```
#! /usr/bin/perl

# Mod date 8/4/03
# New:
# Features:
# Input from CLI: [UserIP, SwitchIP, comm string, protocol and port]
# Output: [Interface #, MAC, TargetIP, switchIP] into logfile
#           And SNMP set of rule to kill the service...
#.....................................................................

($xTargetIP, $DestIP, $Proto, $Port, $EventName, $Sensor) = @ARGV;
$xSwitchIP   = "10.10.10.252"; # static setting for test... vs. reading a file
$xCommString = "public";
$Response    = 'UPN-SERVICE';
if ($Proto == 0) { $xProto = 'TCP'; }

        # Here we remove the (.)s from the TargetIP data....
        $x = '0';
        for ($_ = $xTargetIP;
        s/\./ /;) {
        $x = $x + 1;
        $IP = $_;
                if($x == 3)
                {$TargetIP = $IP;
                        }
                }
        # End TargetIP cleanup.....

#.....................................................................
# Section 0, Var and file definitions
#.....................................................................

# Switch IP address  = $xSwitchIP......... Switch address(s)[may be multiple]
# Switch Community   = $xCommString..................... Community string
# Target IP address  = $xTargetIP.............. The user you are looking for
# Node Alias file    = nodealias.txt......... initial info return from switch
# Cleaned Alias file = UserInfo.txt..................... cleaned nodealias.txt
# Final Log file     = DragonLog.txt.................IP/mac/switch/name/port
# Protocol TCP/UDP   = $Proto
# Port(s)            = $Port

#.....................................................................
# Section 1, get node alias table
#.....................................................................

#$switchIP = $xSwitchIP;
use Net::SNMP(qw(snmp_event_loop oid_lex_sort));
use vars qw($session $error $result $sysUpTime $tableloop $response $Object);
$result = 'null';

($session, $error) = Net::SNMP->session(
        -hostname  => $xSwitchIP,
        -community => $xCommString,
        -port      => 161
);

if (!defined($session)) {
        printf("Error1: %s.\n", $error);
        exit 1;
}

$Object = "1.3.6.1.4.1.52.4.1.3.7.1.1.1";
# This is the Node Alias OID ....
```

```
# $Object = "1.3.6.1.4.1.5624.1.2.6.1.4.0"; Policy MIB, next avail policy index

#... print "\n";
$result = $session->get_table($Object);
if (!defined($result)) {
        printf ("Error2 on get request: %s.\n", $session->error);
        }

# Here we need to loop through the table that we just read.

 $table = @_;

        $next = "null";
                foreach $oid (oid_lex_sort(keys(%{$session->var_bind_list})))
                {
                if ($Object ne $oid) {
                $next = $oid;
                $table->{$oid} = $session->var_bind_list->{$oid};
                                }
                else            {
                        $next = undef;
                        last;    }

                }
        # Here we copy the output to a text file....
        open (OUT, '>nodealias.txt') or die "couldn't open text file...\n";

        foreach $oid  (oid_lex_sort(keys(%{$table}))) {
        if($oid ne ""){
        print OUT ("$oid,$table->{$oid}\n");
        # X printf("%s %s\n", $oid, $table->{$oid});
        } #end if
                } # end foreach

$session->close;
close (OUT);


#.....................................................................
# Section 2, Search for the IP address and get the hash code, clean up.
#.....................................................................

# USING HASH CODE found in the table...
# Our list to hold the alias table...
# X print "Target user IP is ... $xTargetIP \n";

open (HASHIN, "nodealias.txt") or die "Where's the file...?\n";
while(<HASHIN>) {
        $TheRec = $_;
        if($TheRec ne "") {
        chomp($TheRec);
        ($key, $val) = split(/,/,$TheRec, 2);
        # This splits our alias table into two parts,  Key and Value
        if(defined($val)){  # is the $val wacky?
        if($val eq $TargetIP)
        # Here we seach on the IP... [$TargetIP]
        {
        open (ALIASTABLE, '>cleaned.txt') or die "No file...\n";
        @newval = ($key);
                $i = '0';
                # X print "The variable is $key ...\n\n";
                for ($_ = $key; s/\./,/;)
                {# Here we replace the . with a comma (,)...
```

```
                $i = $i + 1;
                $FinalSort = $_;
                @HASH = ($FinalSort);
                }
        } # end if statement
        else {
        # print "Jumped to the else side... oops...\n\n";
        } # end else
                } # end if
                   } # end if
                        } # end while

#
# Next get hash code from FinalSort elements 17,18...
# Then you need to split the one item string into many strings /,/ ...!

@Hash = split(/,/, $FinalSort);
$Hashnumber1 = $Hash[16];
$Hashnumber2 = $Hash[17];

# Now you have the Hash variables...

close (HASHIN);
close (ALIASTABLE);

#... system('rm -f UserInfo.txt');

# Now we use the hash code to search the original nodealias file to get
# the port/mac/name of our target IP...
# So we re-open the nodealias file...

@Hash = ();
open (RESORT, 'nodealias.txt') or die "No file found...\n";
while(<RESORT>) {
$n = '0';
$Line = $_;
chomp($Line);
if ($Line ne "") {
($key1, $val1) = split(/,/,$Line, 2);
        for ($_ = $key1; s/\./,/;){
        $Final = $_;
        @Hash = ($Final);
        $n = $n + 1; # this walks the line intil the end...
        if ($n eq '19') {
        $n = '0'; }
                }
        }
                @List1 = split(/,/, $Final);
                if ($List1[16] eq $Hashnumber1)
                {
                system ('touch UserInfo.txt');
                open(USER, '>>UserInfo.txt') or die "File not found...\n";
                # could check $val1 to see if it's wacky... and drop it ???
                if(defined($val1)) {
                print USER "$Final, $val1 \n";
                #... print "$Final $val1 \n";
                        } # end if
                }
} # end while
# ok, you have the info now in UserInfo.txt, so let's clean it up and display it
close(RESORT);
close(USER);
```

```
        open(USER, 'UserInfo.txt') or die "File not found...190...
UserInfo.txt..\n";
        while(<USER>) {
        $Line = $_;
        chomp($Line);
        @Lin = split(/,/, $Line);
        if ($Lin[15] eq '3') {
        $Interface = $Lin[18];}
        if ($Lin[15] eq '4') {
        $Mac = $Lin[18];}
        }
# Output section ..............................................................

#print "Interface is..... $Interface\n";
#print "MAC is.......... $Mac\n";
#print "User IP address is. $xTargetIP\n";
#print "Switch IP is..... $xSwitchIP\n";
#print "Protocol is..... $Proto\n";
#print "Port Number is..... $Port\n";
#print "\n";
#print "End of Program...\n\n";

# Finaly, we write this to a log file with a time/date stamp....

($Sec, $Min, $Hr, $DayofMonth, $Month, $Yr, $Weekday, %DayofYr, $IsDST) =
 localtime(time);
$RealMonth = $Month + 1;
$FullYr = $Yr + 1900;

open (LOG, '>>LogFile.txt') or die "Couldn't open LogFile... \n";
print LOG
"_____________________________________\n
Time-Date.......... $Hr:$Min:$Sec $RealMonth-$DayofMonth-$FullYr
User IP address is.... $xTargetIP
User MAC is.......... $Mac
Switch IP is.......... $xSwitchIP
Switch port is........ $Interface
Protocol is.......... $Proto
Port number is........ $Port\n";

close (LOG);

# ..............................................................................
# Section 3 SNMPset
# Here we use the Switch/Port data from section2 with the Proto/Port data
# from Dragon to build the discard rule and apply it to the switch/port. We will
# then update the log file...
# ..............................................................................

# The process....
# 1) Create the discard valn
# 2) Create the rule (assign ports here as well!)
# 3) Enable rule...


#  This is the clever secret decoder ring section .....................
#  Mapping the physical ports to their binary postions gives the following !!!
#
#       Hex     code            position        port#
#       80      \200            10000000        1
#       40      \@              01000000        2
#       20      \"blank"        00100000        3
#       10      \020            00010000        4
```

```
#       08      \b              00001000        5
#       04      \4              00000100        6
#       02      \2              00000010        7
#       01      \1              00000001        8
#       00      \0              00000000        null
#
# Use these valuse to set the IngressPortList values.....
# Now, how do we map the 'ifs' number into the code????
# What if we divided the number by 8, with the remainder = the code
# and the leading port groups (8) get a zero....
# Also, this will over-write what ever was there, so we might need to be
# able to read the current values and save them...? If so, that would make the
# code(s) messy...

use Net::SNMP;
use vars qw($session $error $result $classvar $vlanclasslist);

($session, $error) = Net::SNMP->session(
-hostname       => $xSwitchIP,
-community      => $xCommString,
-port           => 161);

if (!defined($session)) {
printf("Error1 on session creation: %s.\n", $error);
exit 1; }

# We will need to setup the 'instance' and 'value' vars to feed into the
# We need to read the $Proto and then load the correct $Protox value...
#
# Enterasys Classification Numbers
# ....................................
#01     etherType(1)
#02     llcDsapSsap(2)
#03     ipTypeOfService(3)
#04     ipProtocolType(4)
#05     ipxClassOfService(5)
#06     ipxPacketType(6)
#07     ipAddressSource(7)
#08     ipAddressDestination(8)
#09     ipAddressBilateral(9)
#10     ipxNetworkSource(10)
#11     ipxNetworkDestination(11)
#12     ipxNetworkBilateral(12)
#13     ipUdpPortSource(13)
#14     ipUdpPortDestination(14)
#15     ipUdpPortBilateral(15)
#16     ipTcpPortSource(16)
#17     ipTcpPortDestination(17)
#18     ipTcpPortBilateral(18)
#19     ipxSocketSource(19)
#20     ipxSocketDestination(20)
#21     ipxSocketBilateral(21)
#22     macAddressSource(22)
#23     macAddressDestination(23)
#24     macAddressBilateral(24)
# ....................................

if     ($xProto eq TCP) {$Protox = '18';}
elsif  ($xProto eq UDP) {$Protox = '15';}

$vlan   = '4000'; # This is the default discard VID, we could change this...
$Port2  = '0';    # End of range port number... 0 if not used...
$vlanclass = "1.3.6.1.4.1.52.4.1.2.16.6.1.4.1.5.$vlan.$Protox.$Port.$Port2";
```

```
$vlancreateOID = "1.3.6.1.2.1.17.7.1.4.3.1.1.$vlan";
$VlanName   = "Discard";
$VlanDiscard = $session->set_request ($vlancreateOID, OCTET_STRING, $VlanName);
# print "New discard vlan info... \n $vlancreateOID  and $VlanName\n";
$enableDiscardOID = "1.3.6.1.2.1.17.7.1.4.3.1.5.$vlan";
$VlanDiscardEnable = $session->set_request ($enableDiscardOID, INTEGER, 1);

# $vlanclasslist = '1.3.6.1.4.1.52.4.1.2.16.6.1.4.1.5.4000.18.80.0';
# Here is where we need to convert the ifs number $Interface into a set code...
# Use the divide by 8 and all will be well...
# $classvar will be of a different length for different switches...! 24/36/48
# And then there are the ISLs... how to filter these out... 52.4.1.3.7.1.1.4.3.1.1

$block = int($Interface / 8);     #Gives the rounded down integer
$rem = ($Interface % 8);          #Gives the remainer
# Notice that the active block is at the [block+1] position !


# Begin the if this port then that code section...
if    ($rem == 1) {$remvar = "\200";}
elsif ($rem == 2) {$remvar = "\@";}
elsif ($rem == 3) {$remvar = "\ ";}
elsif ($rem == 4) {$remvar = "\020";}
elsif ($rem == 5) {$remvar = "\b";}
elsif ($rem == 6) {$remvar = "\4";}
elsif ($rem == 7) {$remvar = "\2";}
elsif ($rem == 0) {$remvar = "\1";}

# blank block filler... meaning that the value is zero.
$f = "\0";
# Need to correct for a zero remainer when on a bit boundry...

#.....................................................................
if ($rem == 0) {$block = $block - 1;

if    ($block == 0) {$classvar = "$remvar";}
elsif ($block == 1) {$classvar = "$f$remvar";}
elsif ($block == 2) {$classvar = "$f$f$remvar";}
elsif ($block == 3) {$classvar = "$f$f$f$remvar";}
elsif ($block == 4) {$classvar = "$f$f$f$f$remvar";}
elsif ($block == 5) {$classvar = "$f$f$f$f$f$remvar";}
                    } # end if
        else {
if     ($block == 0) {$classvar = "$remvar";}
elsif  ($block == 1) {$classvar = "$f$remvar";}
elsif  ($block == 2) {$classvar = "$f$f$remvar";}
elsif  ($block == 3) {$classvar = "$f$f$f$remvar";}
elsif  ($block == 4) {$classvar = "$f$f$f$f$remvar";}
elsif  ($block == 5) {$classvar = "$f$f$f$f$f$remvar";}
              } # end else reloop the above code block...

#.....................................................................

#...print "Blank blocks are...$block and the port is...$rem\n";
#...print "ctVlanClassifyIngressList Value is...\n$vlanclass\n";

#...print "Testvars... $vlan, $Protox, $Port, $Port2 \n";
$result = $session->set_request (
                        $vlanclass, OCTET_STRING, $classvar);
$RowOID = "1.3.6.1.4.1.52.4.1.2.16.6.1.4.1.6.$vlan.$Protox.$Port.$Port2";
$RowStatus = $session -> set_request ($RowOID, INTEGER, 1);
```

```
if (!defined($result)) {
printf("Error3 on result in vlanclass set: %s.\n", $session->error);
$session->close;
exit 1; }

# If no errors, then the filter was set, so update the log file for Dragon...
open (DRAGONLOG, '>>DragonLog.txt') or die "Couldn't open LogFile... \n";
print DRAGONLOG
"$Hr:$Min:$Sec $RealMonth-$DayofMonth-$FullYr: $xTargetIP: $DestIP: $Mac:
$xSwitchIP: $Interface: $Proto: $Port: $EventName: $Sensor: $Response\n";
close (DRAGONLOG);

$session->close;

exit 0;
```